AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method of detecting transitions in video comprising:

   creating a video database that includes random samples of transition effects;

   acquiring a video stream;

   based on the random samples of transition effects in the video database, dividing the video stream into a plurality of sub-sections;

   determining a probability of whether the random samples of transition effects are present at one of the plurality of sub-sections of the video stream, wherein the random samples of transition effects are of a specified number and a specified type; and

   embedding the probability into the sub-section of the video stream.

2. (Previously Presented) The method of claim 1, wherein the determining the probability is performed by a classifier.

3. (Previously Presented) The method of claim 2, wherein the classifier is provided a fixed-sized portion of the sub-section.

4. (Previously Presented) The method of claim 1, further comprising outputting a location of the one or more transition effects and a duration of the one or more transition effects in the video stream.

5. (Cancelled)

6.   (Previously Presented) The method of claim 1, wherein the transition effects comprise one or more of: a dissolve, a fade, a wipe, a iris, a funnel, a mosaic, a roll, a door, a push, a peel, a rotate, and a special effect.

Claims 7-31 Cancelled)

32.   (Previously Presented) A system comprising:

a transition synthesizer module to

create a video database that includes random samples of transition effects,

based on the random samples of transition effects in the video database, divide the video stream into a plurality of sub-sections,

determine a probability of whether the random samples of transition effects are present at one of the plurality of sub-sections of the video stream, wherein the random samples of transition effects are of a specified number and a specified type, and

embed the probability into the sub-section of the video stream; and

a classifier module, the classifier module to be trained to identify the transition effect based on the video sequence.

33.   (Currently Amended) The system of claim 32, wherein the transition synthesizer module is further to generate the video sequence using random video shots from a plurality of video streams, the video shots being transition free.

34.   (Previously Presented) The system of claim 32, wherein each synthesized transition effect is associated with the duration based on the probability distribution.

35.   (Previously Presented) The system of claim 32, wherein the training of the classifier module comprises re-scaling a time series of frame-based feature values associated with the video sequence.

36.   (Currently Amended) A ~~machine-readable~~ computer-readable medium having computer instructions which when executed, cause a ~~machine~~ computer to:

create a video database that includes random samples of transition effects;

acquire a video stream;

detect transition points in the video stream;

automatically generate segment annotations in the video stream at the detected transition points;

based on the random samples of transition effects in the video database segment annotations, divide the video stream into a plurality of sub-sections;

determine a probability of whether one or more synthesized the random samples of transition effects are present at one of the plurality of sub-sections of the video stream, wherein the random samples of one or more transition effects are of a specified number and a specified type; and

embed the probability into the sub-section of the video stream.

37.   (Currently Amended) The ~~machine-readable~~computer-readable medium of claim 36,

wherein the one or more transition effects include a portion of the first shot and a portion

of the second shot.

38.   (Currently Amended) The ~~machine-readable~~computer readable medium of claim 36,

wherein the video transition sequence includes a portion of the first shot before the

transition effect, the ~~the~~ one or more transition effects, and a portion of the second shot

after the one or more transition effects.

39.   (Currently Amended) The ~~machine-readable~~computer-readable medium of claim

36, wherein the one or more transition effects comprise one or more of: a

dissolve, a fade, a wipe, a iris, a funnel, a mosaic, a roll, a door, a push, a peel, a

rotate, and a special effect